



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 09/785,044 | 02/14/2001 | Edwin C. Iliff | ILIFF.015A6 | 4724 |
| 20995 | 7590 | 08/13/2007 | EXAMINER | |
| KNOBBE MARTENS OLSON & BEAR LLP | | | HWANG, JOON H | |
| 2040 MAIN STREET | | | ART UNIT | PAPER NUMBER |
| FOURTEENTH FLOOR | | | 2166 | |
| IRVINE, CA 92614 | | | NOTIFICATION DATE | |
| | | | DELIVERY MODE | |
| | | | 08/13/2007 | |
| | | | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/785,044 | ILIFF, EDWIN C. | |
| | Examiner | Art Unit | |
| | Joon H. Hwang | 2166 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 May 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-52 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-52 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/29/07, 5/18/07.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

1. The applicant amended claims 1, 6, 9, and 11 and added new claims 48-52 in the amendment filed on 5/23/07.

The claims 1-52 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 6, 9, and 11 have been considered but are moot in view of the new ground(s) of rejection.

The applicants added in claims 1 and 11 the limitations of selecting a disease object applicable to a patient and invoking a preferred symptom object or one of the related alternative symptom objects for the selected disease object so as to output a diagnosis of a patient based on the object invocation, added in claim 6 the limitations of at least one of the diagnostic object directly invokes another of the diagnostic objects in a computer-based medical diagnostic system so as to output a diagnosis of a patient based on the prior object invocation, and added in claim 9 the limitations of at least some of the diagnostic objects directly call upon other diagnostic objects to perform their tasks at the appropriate time in a computer-based medical diagnostic system so as to output a diagnosis of a patient. These limitations are addressed in the following rejection.

In response to the applicant's arguments regarding claims 6 and 9, the limitations of claims 6 and 9 are anticipated by Iliff as discussed below in section number 8.

In response to the applicant's arguments regarding claims 1 and 11, the limitations of claims 1 and 11 are anticipated by Iliff and Gray as discussed below in section number 10.

It is a well settled rule that a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. See *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979) and *In re Lamberti*, 545 F.2d 747, 192 USPQ 278 (CCPA 1976) as well as *In re Bode*, 550 F.2d 656, 193 USPQ (CCPA 1977) which indicates such fair suggestions to unpreferred embodiments must be considered even if they were not illustrated. Additionally, it is an equally well settled rule that what a reference can be said to fairly suggest relates to the concepts fairly contained therein, and is not limited by the specific structure chosen to illustrate such concepts. See *In re Bascom*, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 11 directed to a method of reuse of medical script objects. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result. Specifically, the claimed subject matter does not produce

a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter provides for a final result of the method of reuse of medical script objects. This produced result remains in the abstract, and thus, fails to achieve the required status of having real world value. Claims 2-5, 12-19, 43-48, and 52 are likewise rejected.

The claims 6 and 9 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*. Claims 7-8, 10, 20-42, and 49-51 are likewise rejected.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 48-49 and 51-52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, pages 12-13, does not support one disease object *directly* invokes another disease object.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6-9, 20-27, 29-38, 40-42, and 49-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Iliff (U.S. Patent No. 5,868,669).

With respect to claim 6, Iliff teaches an object based automated computer-implemented diagnostic system comprising a plurality of objects which interact to determine a diagnosis of a patient, wherein the objects include at least two diagnostic objects comprising: a disease object, a symptom object, a valuator object, a question object, a node object, and a candidate object (i.e., diagnoses and symptoms, each diagnosis associated with symptoms in MDATA system, lines 24-35 in col. 12, lines 38-45 in col. 21, and line 24 in col. 35 thru line 49 in col. 42, the MDATA system is written in object-oriented program language, such as C++, lines 7-16 in col. 14, therefore teaching object), wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects (i.e., a directed

graph of a node map, line 64 in col. 14 thru line 24 in col. 15, and process of initial screening questions to migraine screening questions and to migraine confirmation questions, lines 25-44 in col. 35, lines 61-67 in col. 39, and lines 18-25 in col. 40). Iliff teaches at least one of the diagnostic objects directly invokes another of the diagnostic objects in a computer-based medical diagnostic system so as to output a diagnosis of a patient based on the prior object invocation (i.e., a directed graph of a node map in which a node directly invokes another node, line 64 in col. 14 thru line 24 in col. 15; migraine object directly invokes migraine symptom/questions objects, lines 61-67 in col. 39).

With respect to claim 7, Iliff teaches the objects include a plurality of disease objects and a plurality of symptom objects (i.e., diagnoses and symptoms, each diagnosis associated with symptoms in MDATA system, lines 24-35 in col. 12, lines 38-45 in col. 21, and line 24 in col. 35 thru line 49 in col. 42, the MDATA system is written in object-oriented program language, such as C++, lines 7-16 in col. 14, therefore teaching object).

With respect to claim 8, Iliff teaches an engine object to coordinate the other objects (i.e., a node map, lines 1-7 in col. 15 and evaluation process 254 in fig. 6).

With respect to claim 9, Iliff teaches an object based automated diagnostic system comprising a plurality of diagnostic objects which interact to determine a diagnosis of a patient, wherein the diagnostic objects include at least a plurality of disease objects, a plurality of symptom objects, and a plurality of valuator objects, and wherein at least some of the diagnostic objects perform their own tasks and directly call

upon other diagnostic objects to perform their tasks at the appropriate time in a computer-based medical diagnostic system so as to output a diagnosis of a patient (i.e., diagnosis, symptoms, and evaluation processes, each diagnosis associated with symptoms in MDATA system, lines 24-35 in col. 12, lines 38-45 in col. 21, lines 36-41 in col. 39, line 24 in col. 35 thru line 49 in col. 42, and lines 24-37 in col. 18; the MDATA system is written in object-oriented program language, such as C++, lines 7-16 in col. 14, therefore teaching object; a directed graph of a node map in which a node directly invokes another node, line 64 in col. 14 thru line 24 in col. 15).

With respect to claim 20, Iliff teaches the objects include a disease object (i.e., migraine object, lines 53-60 in col. 39), a symptom object (i.e., headache, lines 53-60 in col. 39), a valuator object (i.e., evaluation process 254, lines 36-41 in col. 39), a question object (i.e., questions, lines 41-52 in col. 39), a node object (i.e., interface to a client 124 in fig. 4), and a candidate object (i.e., ranked lists, lines 12-35 in col. 39).

With respect to claim 21, Iliff teaches the symptom object invokes the valuator object (i.e., the results of symptoms are evaluated, lines 53-60 in col. 39).

With respect to claim 22, Iliff teaches the valuator object invokes the question object (i.e., another screen questions are invoked after the evaluation, line 53 in col. 39 thru line 12 in col. 40).

With respect to claim 23, Iliff teaches the question object invokes the node object (i.e., another screen questions are asked to the user, line 53 in col. 39 thru line 12 in col. 40).

With respect to claim 24, Iliff teaches a particular disease is associated with a

plurality of disease objects corresponding to different phases of the particular disease (i.e., stages of illness, lines 31-42 in col. 1).

With respect to claim 25, Iliff teaches a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease (lines 22-28 in col. 47).

With respect to claim 26, Iliff teaches a particular disease object is representative of a plurality of related diseases that share common symptoms (i.e., meningitis and brain tumor shares headache, lines 11-26 in col. 41).

With respect to claim 27, Iliff teaches the objects act independently of other objects and a particular object retains a record of its actions for future reference (lines 37-47 in col. 13 and lines 24-44 in col. 18).

With respect to claim 29, Iliff teaches a particular disease object monitors the questions and answers of other disease objects (lines 11-26 in col. 41 and lines 43-46 in col. 40).

With respect to claim 30, Iliff teaches the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects (i.e., excluding diseases from diagnostic consideration, lines 11-26 in col. 41 and lines 43-46 in col. 40).

The limitations of claim 31 are rejected in the analysis of claim 21 above, and the claim is rejected on that basis.

The limitations of claim 32 are rejected in the analysis of claim 20 above, and the claim is rejected on that basis.

The limitations of claim 33 are rejected in the analysis of claim 22 above, and the claim is rejected on that basis.

The limitations of claim 34 are rejected in the analysis of claim 23 above, and the claim is rejected on that basis.

The limitations of claim 35 are rejected in the analysis of claim 24 above, and the claim is rejected on that basis.

The limitations of claim 36 are rejected in the analysis of claim 25 above, and the claim is rejected on that basis.

The limitations of claim 37 are rejected in the analysis of claim 26 above, and the claim is rejected on that basis.

The limitations of claim 38 are rejected in the analysis of claim 27 above, and the claim is rejected on that basis.

The limitations of claim 40 are rejected in the analysis of claim 29 above, and the claim is rejected on that basis.

The limitations of claim 41 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

The limitations of claim 42 are rejected in the analysis of claim 30 above, and the claim is rejected on that basis.

With respect to claim 49, Iliff teaches the disease object directly invokes another disease object (i.e., migraine disease object directly invokes a next disease object in a ranked list, lines 38-42 in col. 40 and lines 17-35 in col. 39).

With respect to claim 50, Iliff teaches the disease object directly invokes the

symptom object (i.e., migraine object directly invokes migraine symptom/questions objects, lines 61-67 in col. 39).

With respect to claim 51, Iliff teaches one of the plurality of disease objects directly calls another of the plurality of disease object (i.e., migraine disease object directly invokes a next disease object in a ranked list, lines 38-42 in col. 40 and lines 17-35 in col. 39).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 3-5, 10-13, 15-19, 43-48, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iliff (U.S. Patent No. 5,868,669) in view of Gray (U.S. Patent No. 6,149,585).

With respect to claim 1, Iliff teaches providing a plurality of disease objects, each disease object associated with a plurality of symptom objects (i.e., diagnoses and symptoms, each diagnosis associated with symptoms in MDATA system, lines 24-35 in col. 12, lines 38-45 in col. 21, and line 24 in col. 35 thru line 49 in col. 42, the MDATA system is written in object-oriented program language, such as C++, lines 7-16 in col. 14, therefore teaching object). Iliff teaches assigning a weight for each symptom (i.e., weighted symptom questions, lines 24-34 in col. 60, lines 45-48 in col. 61, and lines 28-

39 in col. 62). Iliff teaches alternative symptoms for a particular preferred symptom are selected from a set of archived symptoms objects that are available for reuse (i.e., symptoms of headache, lines 6-29 in col. 13, fig. 6, lines 36-57 in col. 39, and lines 7-32 in col. 40). Iliff teaches selecting a disease object applicable to a patient (i.e., the MDATA system concludes that migraine is the most likely cause of the patient's headache, lines 53-60 in col. 39). Iliff teaches invoking a preferred symptom object or one of the related alternative symptom objects for the selected disease object so as to output a diagnosis of a patient based on the object invocation (i.e., migraine object directly invokes migraine symptom/questions objects, lines 61-67 in col. 39). Iliff does not explicitly disclose a preferred weight and an alternative weight. However, Gray discloses a plurality of disease associated with a plurality of symptoms in a medical diagnostic enhancement system (lines 7-24 in col. 6 and line 23 in col. 2 thru line 41 in col. 3). Gray also discloses assigning a weight for each symptom, wherein a particular disease includes a preferred weight for one or more preferred symptoms and an alternative weight for one or more related alternative symptoms, wherein the alternative symptoms are selected from a set of symptoms (lines 25-48 in col. 6). Therefore, based on Iliff in view of Gray, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Gray to the system of Iliff in order to present an accurate diagnosis.

With respect to claim 3, Iliff teaches the set of archived symptom objects is stored in a database (fig. 1, fig. 3, and fig. 6).

With respect to claim 4, Iliff teaches accessing the set of archived symptom

objects stored in the database via a global computer network (fig. 1).

With respect to claim 5, Iliff teaches each symptom object has underlying objects used to establish a symptom (i.e., a node map, lines 1-7 in col. 15), wherein the objects are arranged in a hierarchical relationship (i.e., a directed graph of a node map, line 64 in col. 14 thru line 24 in col. 15).

With respect to claim 10, Iliff discloses the claimed subject matter as discussed above. Iliff further teaches one or more alternative symptoms of a preferred symptom (i.e., symptoms of headache, lines 36-57 in col. 39). Iliff does not explicitly disclose a preferred weight and an alternative weight. However, Gray discloses a plurality of disease associated with a plurality of symptoms in a medical diagnostic enhancement system (lines 7-24 in col. 6 and line 23 in col. 2 thru line 41 in col. 3). Gray also discloses assigning a weight for each symptom, wherein a particular disease includes a preferred weight for one or more preferred symptoms and an alternative weight for one or more alternative symptoms (lines 25-48 in col. 6). Therefore, based on Iliff in view of Gray, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Gray to the system of Iliff in order to present an accurate diagnosis.

With respect to claim 11, Iliff teaches providing a plurality of disease objects, each disease object associated with a plurality of symptom objects (i.e., diagnoses and symptoms, each diagnosis associated with symptoms in MDATA system, lines 24-35 in col. 12, lines 38-45 in col. 21, and line 24 in col. 35 thru line 49 in col. 42, the MDATA system is written in object-oriented program language, such as C++, lines 7-16

in col. 14, therefore teaching object). Iliff teaches assigning a weight for each symptom (i.e., weighted symptom questions, lines 24-34 in col. 60, lines 45-48 in col. 61, and lines 28-39 in col. 62). Iliff teaches alternative symptoms for a particular preferred symptom are selected from a set of archived symptoms objects that are available for reuse (lines 6-29 in col. 13, fig. 6, lines 36-57 in col. 39, and lines 7-32 in col. 40). Iliff teaches a particular preferred symptom has one or more related alternative symptoms that represent different approaches for eliciting further diagnostic information related to a same patient health condition (i.e., symptoms of headache, lines 36-57 in col. 39, lines 36-57 in col. 39, and lines 7-32 in col. 40). Iliff teaches selecting a disease object applicable to a patient (i.e., the MDATA system concludes that migraine is the most likely cause of the patient's headache, lines 53-60 in col. 39). Iliff teaches invoking a preferred symptom object or one of the related alternative symptom objects for the selected disease object so as to output a diagnosis of a patient based on the object invocation (i.e., migraine object directly invokes migraine symptom/questions objects, lines 61-67 in col. 39). Iliff does not explicitly disclose a preferred weight and an alternative weight. However, Gray discloses a plurality of disease associated with a plurality of symptoms in a medical diagnostic enhancement system (lines 7-24 in col. 6 and line 23 in col. 2 thru line 41 in col. 3). Gray also discloses assigning a weight for each symptom, wherein a particular disease includes a preferred weight for one or more preferred symptoms and an alternative weight for one or more alternative symptoms, wherein the alternative symptoms for a particular preferred symptom are selected from a set of symptoms (lines 25-48 in col. 6). Therefore, based on Iliff in view of Gray, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Gray to the system of Iliff in order to present an accurate diagnosis.

With respect to claim 12, Gray further teaches weights can be different (lines 25-48 in col. 6). Therefore, the limitations of claim 12 are rejected in the analysis of claim 11 above, and the claim is rejected on that basis.

With respect to claim 13, Gray further teaches weights can be different (lines 25-48 in col. 6). Therefore, the limitations of claim 13 are rejected in the analysis of claim 12 above, and the claim is rejected on that basis.

With respect to claim 15, Iliff teaches the set of archived symptom objects is stored in a database (fig. 1, fig. 3, and fig. 6).

With respect to claim 16, Iliff teaches accessing the set of archived symptom objects stored in the database via a global computer network (fig. 1).

With respect to claim 17, Iliff teaches each symptom object has underlying objects used to establish a symptom (i.e., a node map, lines 1-7 in col. 15).

With respect to claim 18, Iliff teaches the reuse includes using one of the archived symptom objects in conjunction with a plurality of disease objects (lines 36-52 in col. 39).

With respect to claim 19, Iliff teaches a particular preferred symptom is selected when a particular diagnosis is likely (lines 36-52 in col. 39).

The limitations of claim 43 are rejected in the analysis of claim 18 above, and the claim is rejected on that basis.

The limitations of claim 44 are rejected in the analysis of claim 19 above, and the claim is rejected on that basis.

With respect to claim 45, Iliff teaches a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease (i.e., stages of illness, lines 31-42 in col. 1).

With respect to claim 46, Iliff teaches a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease (lines 22-28 in col. 47).

With respect to claim 47, Iliff teaches a particular disease object is representative of a plurality of related diseases that share common symptoms (i.e., meningitis and brain tumor shares headache, lines 11-26 in col. 41).

With respect to claim 48, Iliff teaches the selected disease object directly invokes another of the plurality of disease objects (i.e., migraine disease object directly invokes a next disease object in a ranked list, lines 38-42 in col. 40 and lines 17-35 in col. 39).

With respect to claim 52, Iliff teaches the selected disease object directly invokes another of the plurality of disease objects (i.e., migraine disease object directly invokes a next disease object in a ranked list, lines 38-42 in col. 40 and lines 17-35 in col. 39).

11. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iliff (U.S. Patent No. 5,868,669) in view of Gray (U.S. Patent No. 6,149,585), and further in view of Branson et al. (U.S. Patent No. 6,598,035).

With respect to claim 2, Iliff and Gray disclose the claimed subject matter as

discussed above except assigning a new name for a symptom object that is reused. However, Branson teaches assigning a new name for a symptom object that is reused (fig. 16 and lines 17-39 in col. 20) in order to provide customization and extension of an object (lines 21-57 in col. 4). Therefore, based on Iliff in view of Gray, and further in view of Branson, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Branson to the system of Iliff in order to provide customization and extension of an object.

The limitations of claim 14 are rejected in the analysis of claim 2 above, and the claim is rejected on that basis.

12. Claims 28 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iliff (U.S. Patent No. 5,868,669) in view of Branson et al. (U.S. Patent No. 6,598,035).

With respect to claim 28, Iliff discloses the claimed subject matter as discussed above except encapsulation of data. However, Branson teaches each object has corresponding data and processes, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data (lines 39-50 in col. 6, lines 26-34 in col. 12, and lines 23-31 in col. 15) in order to maintain the integrity of the data. Therefore, based on Iliff in view of Branson, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Branson to the system of Iliff in order to maintain the integrity of data of an object.

The limitations of claim 39 are rejected in the analysis of claim 28 above, and the claim is rejected on that basis.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joon Hwang
Patent Examiner
Technology Center 2100

8/3/07